January 21, 1974

MEXICO AND UNITED STATES SCREWWORM RESEARCH NEEDS

I. Screwworm fly strain research and coordinated methods development generally comparing the fly behavior in the "wild" and in the laboratory. Study systems for maintaining and incorporating new strains into the production operation as necessary.

1. Develop methods for determining the fitness of Plant strains.

a. Develop New large cages for this purpose that require the flies to fly over partitions to mate.

2. Conduct tests on the mating compatibility of strains from different parts of Mexico.

a. Sterility results from Puerto Rico and mating tests conducted between the ARS and APHIS strains indicate possible existence of Mating Incompatibility.

3. When conducting mating tests between different strains use flies of similar sexual maturity instead of similar age.

a. Do research on the feasibility of this.

4. Do research on the use of Stress to secure genetic improvement of strains.

5. Do research on the use of stress to maintain the fitness of plant strains.

6. Results on sterility from comparison of the Puerto Rican and Mexican strains and the Tex-Mex and APHIS strains indicate a significant change in fitness in the course of 6 months to a year's production in the Plant.

a. Consider changing the plant strain every 6 months to a year.

7. Do research into the difference between keeping several separate strains from different parts of Mexico in production as compared to having one composite strain.

II. Research directed toward the securing of a screwworm fly attractant for (1) field studies, and (2) oviposition in the laboratory and the field.

1. We have long recognized the need for more efficient attractants. The following are four examples of specific attractant needs:

a. An attractant to lure screwworm flies into screwworm field traps to test released fly strains and evaluate program effectiveness.

b. An oviposition attractant (artificial wound) which can be used in field studies.

c. An improved oviposition attractant for use in fly colonization in the laboratory and the production plant.

d. A good attractant can be used as another tool to combat screwworms in field programs. Fly traps baited with a good lure and placed in areas harboring stubborn native fly populations could supplement other program measures in reducing native fly numbers by drawing native flies into traps, thus, removing them from circulation. Catches from traps used in this manner would not even have to be checked and identified and test animals could be used to monitor progress of trapping. In some cases this type trapping could precede the release of sterile flies.

III. Basic biology and ecology of field behavior of native screwworms, including food sources, mating habits, distribution patterns, migration, and population dynamics.

IV. Nutritional studies—Dietary studies should be conducted for mass rearing and for colonization. Qualitative dietary studies should be performed.

V. Continue research for a universal pesticide. This is one which would be effective against screwworms, ticks, mites, cattle grubs, lice, or a combination of some of these.

VI. Study sex separation or determination in the egg or larval stage. Determine if sex ratio can be modified to increase sterile males released and to determine if more females can be introduced into the colony.

VII. Determine new methodology for evaluation of fly strains before introduction into production.

January [illegible], 1974

TO: Donald L. Williams
Mission, Texas

Comments by Dr. Bourrigan — 6 thru 8

MEXICO SCREWWORM RESEARCH NEEDS

1. Screworm fly strain research and coordinated methods development generally comparing the fly behavior in the "wild" and in the laboratory. Study system for maintaining and incorporating new strains into the production operation as necessary.

2. Research directed toward the securing of a screworm fly attractant for (1) field studies, and (2) oviposition in the laboratory and the field.

3. Basic biology and ecology of field behavior of native screworms, including food sources, mating habits, distribution patterns, migration, and population dynamics.

4. Nutritional studies—Dietary studies should be conducted for mass rearing and for colonization. Qualitative dietary studies should be performed.

5. Continue research for a universal particide. This is one which would be effective against screworms, ticks, mites, cattle grubs, lice, or a combination of some of these.

6. One of our major efforts has been to put out a fly that is reasonably able to compete with the wild fly. Is it not possible to identify genetic and other factors which will enable us to produce a male which is better than the wild fly? Can we produce a fly which continues to get better or at least does not get poorer and thus, perhaps avoid having to change strains so often?

7. When we are in the process of deciding if we should change production strains what tests should have been completed — for example will the males of the proposed strain mate with wild females from the area in which the males will be dropped? Have such tests actually been made?

8. A procedure to separate male from female larvae or adults or in some manner avoid having to produce or distribute female flies?

U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE 2-25 74

TO E. A. Taylor

- [ ] ACTION
- [ ] NOTE AND RETURN
- [ ] APPROVAL
- [ ] PER PHONE CALL
- [ ] AS REQUESTED
- [ ] RECOMMENDATION
- [ ] FOR COMMENT
- [ ] REPLY FOR SIGNATURE OF
- [x] FOR INFORMATION
- [ ] RETURNED
- [ ] INITIALS
- [ ] SEE ME
- [ ] NOTE AND FILE
- [ ] YOUR SIGNATURE

REMARKS

RECEIVED
FEB 26 1974
AREA OFFICE
WESLACO, TEXAS

FROM

GPO : 1964 OF—742-059

FORM **AD-514** (8-64)

U.S. DEPARTMENT OF AGRICULTURE

REFERENCE SLIP

DATE 2-23-74

TO E.A. Taylor

- [ ] ACTION
- [ ] NOTE AND RETURN
- [ ] APPROVAL
- [ ] PER PHONE CALL
- [ ] AS REQUESTED
- [ ] RECOMMENDATION
- [ ] FOR COMMENT
- [ ] READY FOR SIGNATURE OF
- [x] FOR INFORMATION
- [ ] RETURNED
- [ ] INITIALS
- [ ] SEE ME
- [ ] NOTE AND FILE
- [ ] YOUR SIGNATURE

REMARKS

RECEIVED
FEB 26 1974
AREA OFFICE
WESLACO, TEXAS

FROM

USDA 1040-2 (11-64)

TELEX February 25, 1974

Dr. Marco A. Villasenor
Comision Mexico-Americana Para La Eradicacion del
Gusano Barrenador
Liebnitz No. 20 - 12 Piso
Mexico 5, D. F.

Research Technicians Erasmo Lopez and Horacio Bazan depart Mission 27 February, destination Cd. Victoria, for routine fly trapping operation and return to Mission 1 March.

Following ARS entomologists plan to attend IX Congreso Nacional de Entomologia, Mexico City, 10-13 March: E. A. Taylor, O. H. Graham, C. M. Jones, B. G. Hightower, and W. G. Hart. Taylor, Graham and Hart plan to go on to Chiapas in connection with future screwworm and Mediterranean fruit fly research programs. Please request reservations Hotel Bonampak, Tuxtla Gutierrez, 13-16 March.

O. H. Graham
Acting Research Leader

Le E A Taylor

TELEX February 25, 1974

Dr. Mario A. Villanueva
Comision Mexico-Americana Para La Erradicacion del
Gusano Barrenador
Liebnitz No. 20 - 12 Piso
Mexico 5, D. F.

Research Technicians Erasmo Lopez and Horacio Baran depart Mission 27 February, destination Cd. Victoria, for routine fly trapping operation and return to Mission 1 March.

Following ARS entomologists plan to attend IX Congreso Nacional de Entomologia, Mexico City, 10-13 March: E. A. Taylor, O. H. Graham, C. M. Jones, B. G. Hightower, and W. G. Hart. Taylor, Graham and Hart plan to go on to Chiapas in connection with future screwworm and Mediterranean fruit fly research programs. Please request reservations Hotel Bonampak, Tuxtla Gutierrez, 13-16 March.

O. H. Graham
Acting Research Leader

Ric E A Stegler

COMISION MEXICO-AMERICANA PARA LA ERRADICACION DEL GUSANO BARRENADOR

LA ENERGIA ATOMICA AL SERVICIO DEL GANADERO

LEIBNITZ Nº. 20 - 12o. PISO
MEXICO 5, D. F.

DIRECTOR:
DR. MARCO ANTONIO VILLASEÑOR
TEL. 531-65-96

CO-DIRECTOR:
DR. NORVAN L. MEYER
TEL. 531-85-69

Note on Page 2

March 13, 1974

CONEE-NASA PARTICIPATION IN SCREWWORM ERADICATION

On February 12, 1974, the Ministry of Foreign Affairs of Mexico approved NASA participation with CONEE in a test site research project to determine the feasibility of the use of remote sensing in defining habitat conducive to the growth of the screwworm fly. The 10,000-square-mile test site is centered about Cordoba, Veracruz, Mexico, and encompasses varied terrain from sea level to 3,000-meters altitude. It is planned to observe the ground environment at several altitudes by means of meteorological stations, soil sampling, vegetative cover mapping, etc. These data will be compared with meteorological satellite observations of the same area and with the incidence of screwworm populations as determined by case incidence and by fly trapping.

Headquarters for test site operations is Calle Huatusco # 1, Fortín, Veracruz. Major Armando Belmont has been designated by CONEE to be the on-site Director and Dr. Alberto Broce has been designated by NASA to be Co-Director of the field operation. Dr. Broce arrived at the test site on 15 March, and Major Belmont on 18 March. NASA is providing funds for office space and for salaries of 3 livestock inspectors and office help.

Technical presentation of satellite-obtained data continues with outstanding success. In cooperation with the USDA field station, Weslaco, Texas, temperature measurements were made during a severe winter storm which materially affected crops in the Río Grande Valley. Satellite data was measured effectively with an accuracy of $\pm$ 1°C the ground temperature during these field tests. Ground measurements were made by USDA teams on land, water, and from low-flying aircraft using precision thermometers and radiometers.

Another important advance concerns our ability to now rectify by computer methods the skewed satellite picture, to overlay rather precisely on navigation charts used by aircraft for dropping sterile flies.

In January, NASA let an additional contract for $300,000 dollars to assure success in delivery of the final computer output to the Joint Commission on

a routine daily basis beginning in March 1975. Previously, the Mexican environmental data has been produced on experimental apparatus which is flexible and useful in developing technique but which cannot be dedicated to routine activity. The new system known as the Production Processor has the capacity for constant, routine production of data. It will be several months before this system array is in routine use. In the meantime, techniques development is continuing on the original system. The CONEE is also continuing development of routine computer programs for this project.

NASA now has a computer program for determining from ERTS Satellite data the location of water bodies of 10 acres or more in size. It is believed that this system can be very useful to the Screwworm Commission in determining water holes, streams and other areas in arid zones where the sterile flies should be released. Within NASA's current cooperative effort, the resources to provide this information do not exist.

PROBLEM AREAS

CONEE-NASA is now operating a test site to determine relationship of screwworm with local environment. Yet neither agency has expertise in screwworm ecology, in trapping insects or the numerous other tasks associated with such an effort. It had been agreed that ARS would provide this expertise through contractual arrangements with INIA. We have now been informed that we cannot expect any routine support from this source. CONEE and NASA solicit any technical assistance for this project that is possible - both in the field entomology operations and assistance in interpreting the measured environmental data in final form for maximum assistance to the Screwworm Commission.

DR. CHARLES M. BARNES
TECHNICAL COORDINATOR
REMOTE SENSING PROGRAM FOR
SCREWWORM ERADICATION

Eag

Subtropical Texas Area
P. O. Box 267
Weslaco, Texas 78596

June 3, 1974

Subject: Use of APHIS Aircraft to Support Remote Sensing for Screwworm Ecological Studies in Mexico.

To: M. E. Meadows, Jr., Veterinarian in Charge
APHIS, Mission, Texas 78572

Pursuant to our recent discussions concerning the subject item and observations indicating that the aircraft would be ideal for the intended purpose we are submitting the following proposal for your consideration:

1. The Twin Beech aircraft would be used in Mexico for research studies concerning aerial photography for detection of ecological factors related to the distribution and spread of the screwworm fly. In the event that APHIS, Mission sees a need for additional aerial photography in conjunction with the Screwworm program ARS, Weslaco will provide this support.

2. Approximately 5-8 hours of flying time per month will be required to acquire the needed photography.

3. APHIS, Mission, Texas will provide the aircraft, with camera port and pilot, on a reimbursable basis with ARS, Weslaco.

4. ARS will negotiate the required permits for conducting the aerial photography over test sites in Mexico.

5. In scheduling the flights to Mexico every effort will be made to provide as much lead time to APHIS personnel prior to the required flights. Whenever possible they will be scheduled by the end of the workday on the Friday preceding the required flight. Since this type of aerial photography must be conducted under fairly restrictive weather conditions some flexibility must be exercised in scheduling the flights.

Due to the urgency of developing techniques that will provide inexpensive methods of gathering data from large land areas and the possibility that remote sensing offers great promise for detecting and delimiting ecological factors that relate to the build up of screwworm populations we would appreciate your favorable consideration of the above proposal.

E. A. Taylor
Area Director

cc:
A. Cooper
W. Snow
L. Henderson

ARS:SR:EATaylor:ld 6/3/74

Subtropical Texas Area
P. O. Box 207
Weslaco, Texas 78596

June 3, 1974

Subject: Use of ARMIS Aircraft to Support Remote Sensing for Resources Geological Studies in Mexico.

To: M. E. Meadows, Jr., Veterinarian in Charge
ARMIS, Mission, Texas 78572

Pursuant to our recent discussions concerning the subject item and observations indicating that the aircraft would be ideal for the intended purpose we are submitting the following proposal for your consideration:

1. The Twin Beech aircraft would be used in Mexico for research studies concerning aerial photography for detection of geological factors related to the distribution and spread of the screwworm fly. In the event that ARMIS, Mission sees a need for additional aerial photography in conjunction with the Screwworm program ARS, Weslaco will provide this support.

2. Approximately 5-8 hours of flying time per month will be required to acquire the needed photography.

3. ARMIS, Mission, Texas will provide the aircraft, with camera port and pilot, on a reimbursable basis with ARS, Weslaco.

4. ARS will negotiate the required permits for conducting the aerial photography over test areas in Mexico.

5. In scheduling the flights to Mexico every effort will be made to provide as much lead time to ARMIS personnel prior to the required flights. Whenever possible they will be scheduled by the end of the workday on the Friday preceding the required flight. Since this type of aerial photography must be conducted under fairly restrictive weather conditions some flexibility must be exercised in scheduling the flights.

Due to the urgency of developing techniques that will provide inexpensive methods of gathering data from large land areas and the possibility that remote sensing offers great promise for detecting and delineating ecological factors that relate to the build up of screwworm populations we would appreciate your favorable consideration of the above proposal.

E. A. Taylor
Area Director

cc:
A. Cooper
W. Snow

L. Hardeman

ARS:SR:EATaylor:ld 6/3/74

Sent via telecopier 8/20/74

PLEASE TRANSMIT THESE COPIES TO E. A. Taylor
in Dr. Cooper's Office - 6 pages

O+

SCREWWORM MSSN

1775639CMAGBME

FROM S.W. MEXICO CITY, AUGUST 19, 1974.

DR. WENDELL SNOW

MISSION, TEXAS.

THE MEXICAN GOVERNMENT, AS REPRESENTED BY DR. CAMPOS LOPEZ, DIRECTOR OF ANIMAL HEALTH, AND DR. M.A. VILLASE#OR, DIRECTOR OF THE SCREWWORM COMMISSION, REQUIRE ADVANCE APPROVAL OF ANY ANIMAL HEALTH RELATED RESEARCH PROJECT TO BE CONDUCTED IN MEXICO. ONCE A PROJECT HAS BEEN APPROVED THESE SAME MEN REQUIRE THAT THEY BE INFORMED OF INTENDED MOVEMENT OF SCIENTISTS AND OTHERS COMING INTO MEXICO TO WORK ON OR REVIEW SUCH PROGRAMS. THE STATED PURPOSE FOR SUCH NOTIFICATION REQUIREMENT IS TO MAKE IT POSSIBLE FOR THE MEXICAN GOVERNMENT TO ASSIGN PERSONNEL TO ACCOMPANY U.S. SCIENTISTS WHEN DEEMED APPROPRIATE. FOR THAT REASON, NOTICE OF PLANNED TRIPS SHOULD BE GIVEN WITH AS MUCH ANTICIPATION AS POSSIBLE. IF YOU DESIRE, YOU CAN GIVE NOTICE OF PLANNED TRIPS BY TELEX AND I WILL MAKE SURE THAT DR. VILLASE#OR GETS THE INFORMATION.

NORVAN L. MEYER

tions.

WASHINGTON (UPI) — Securities executive Thomas P. Richardson of Los Angeles, a close associate of fugitive financier Robert Vesco, invoked the Fifth Amendment nine times Tuesday at a Senate hearing into alleged smuggling of sophisticated automatic weapons from the United States to Costa Rica.

ST. PAUL, Minn. (UPI) — Prosecutor R.D. Hurd said Tuesday he will ask the government to appeal a federal judge's dismissal of all five felony charges against Dennis Banks and Russell Means, who led last year's 71-day armed occupation of Wounded Knee, S.D.

WASHINGTON (UPI) — Attorney General William B. Saxbe has ordered a Justice Department study of the Wounded Knee trial and similar cases the government has lost where defendants pleaded they were being tried for political motives.

PARIS (UPI) — French artist Andre Dunoyer de Segonzac, a contemporary of Picasso who left the cubist ranks to return to traditional landscape painting, died Tuesday in Paris of bronchitis. He was 90.

BERLIN (UPI) — Soviet authorities in East Berlin Tuesday released a U.S. soldier held 10 days for allegedly trying to smuggle two East Germans to the West, a U.S. Army spokesman said.

U.S., Mexico To Cooperate On Screw Worms

U.S. Assistant Secretary of Agriculture Richard L. Felthner said Tuesday on his arrival here that the United States and Mexico will cooperate in producing 300 million sterile flies a month to combat the screw worm, which annually causes losses of 400 million pesos in Mexico and 100 million dollars in the United States.

Felthner said the United States would pay for 80 per cent of the cost of a plant now being built in Tuxtla Gutierrez to produce the sterile flies. He added that construction of the plant is being supervised jointly by the two countries.

The secretary is attending the fifth Mexican-American meeting on the screw worm, which began Tuesday.

ocurro el I Congreso Electrónicas, Ayer

minación o exterminio".

Escucharon delegados de México, Estados Unidos, Italia, Francia, Uruguay, Perú, Chile y Brasil. A la par que el congreso, se presenta en el Centro Médico una exposición de electrónica.

Méndez hizo un cariñoso recuerdo de los ingenieros Manuel Cerrillo, Walter C. Buchanan, Juan Manuel Ramírez Caraza, Erik Wallstein y otros que hicieron posible en México la creación de la carrera de ingeniero en comunicaciones eléctricas y electrónicas.

Asistieron a la ceremonia los subsecretarios de Transporte, ingeniero Javier A. Barrientos; de Radiodifusión, licenciado Miguel Alvarez Acosta; los doctores Ignacio Barragán, secretario general del Politécnico; Guillermo Massieu, director del centro de investigación y estudios avanzados del propio Politécnico; Gerardo Bueno, director del Conacyt; ingeniero Gonzalo Sedas, presidente de la Unión Mexicana de Asociaciones de Ingenieros; ingeniero Enrique del Valle, director de Ingeniería de la UNAM; ingeniero Carlos Núñez Arellano, director de Telecomunicaciones; Juan Legaspi, director de Telégrafos.

Planta Productora de Moscas Estériles Contra el Gusano Barrenador, en Chiapas

El Subsecretario de Agricultura de EU Llegó Para Tratar de Ello con el Director de Sanidad Animal

México y Estados Unidos se unirán para erradicar a la plaga del "gusano barrenador", que aquí causa anualmente pérdidas de 300 a 400 millones de pesos y en el vecino país, los daños ascienden a más de 1,000 millones de pesos.

Así lo afirmaron ayer los señores Dr. Richard L. Feltner, subsecretario de Agricultura y Ganadería de Estados Unidos y el Dr. Héctor Campos López, director de Sanidad Animal de la Secretaría de Agricultura y Ganadería.

Los dos funcionarios se reunirán a partir de hoy en Tuxtla Gutiérrez, Chiapas, en donde se construye, con la cooperación de los gobiernos de México y Estados Unidos (este último con una aportación de ochenta por ciento), una planta de producción de moscas estériles que es el único recurso de que se dispone para exterminar al "gusano barrenador". Dicha planta costará 100 millones de pesos.

El doctor Feltner dijo que en Texas "hay una planta de moscas estériles, que produce 100 millones de estos insectos, a la semana y con la de Chiapas tendremos más de 300 millones a la semana, lo que nos permitirá mayores recursos para luchar contra esta plaga".

El funcionario estadunidense expresó que "los principales problemas que combatimos conjuntamente con México son las plagas de la garrapata, la del gusano barrenador y la fiebre aftosa".

El doctor Campos López, de la SGA dijo que "México y Estados Unidos realizamos operaciones conjuntas en defensa de la ganadería de ambos países".

Niega el Neurólogo Enrique Otero que Haya Drogas que Curen el Parkinson

De unos tres años a la fecha se han hecho "anuncios sensacionalistas" acerca de drogas capaces de curar el mal de Parkinson. No existen tales medicamentos "milagrosos" y todo tiende a beneficiar a ciertos laboratorios productores de esas medicinas, dijo el neurólogo doctor Enrique Otero, del Instituto Nacional de Neurología, quien manifestó que "el mal de Parkinson afecta a gran número de individuos entre 30 y 70 años, precisamente cuando desarrollan al máximo sus capacidades intelectuales".

El mal de Parkinson produce movimientos involuntarios, temblores de las extremidades o rigidez de algunos músculos. El doctor Otero aceptó que en la actualidad hay medicinas que controlan muchos de los síntomas de esa enfermedad. "El problema actual no es "controlar" esos movimientos involuntarios del paciente, sino detener la evolución de la enfermedad, que es progresiva. Indicó el doctor Otero que "debiera haber un control más eficaz de la propaganda de algunos medicamentos a los que se les atribuye eficacia casi milagrosa, cuando todavía se ignora el origen de ese mal relativamente poco común. En México existen unos 50,000 enfermos del mal de Parkinson quienes consumen tales medicamentos que solamente ofrecen paliativos, pero no una cura real.

Por su parte, el doctor Fernando Zermeño, neuropediatra de dicho instituto manifestó que en su opinión, la demencia senil es uno de los males más frecuentes y posiblemente más "normales", porque es el resultado de un proceso característico del envejecimiento.

However I would like to quickly add that research by its nature requires some degree of freedom. Tomorrow's experiments are built on todays results. Research goals are less defined and often difficult to accept from an administrative standpoint. However, I am sure your desire is not to destroy the research climate because in this time of short funds and many problems we would be foolish to waste research effort in a program doomed to failure because of administrative ~~folley.~~ restrictions and detail.

However I would like to quickly add that research by its nature requires some degree of freedom. Tomorrow's experiments are built on todays results. Research goals are less defined and often difficult to adapt from an administrative standpoint. However, I am sure your desire is not to destroy the research climate because in this time of short funds and many problems we would be foolish to waste research effort in a program doom to failure because of administrative folly.

Rec'd Via telephone 10-3-74 1:20 pm Juanita

TO: L.S. HENDERSON, NPS, BELTSVILLE
E. A. TAYLOR, WESLACO, TEXAS
FM: H C COX, NEW ORLEANS--

DRAFT:HCCox:mlw
ARS:DASR:10/3/74

YOUR COMMENTS BY
TELEPHONE, PLEASE.

Dear Dr. Meyer:

I would again like to express my appreciation to Dr. Antonio Villasenor, you, and the other members of the Joint Commission for the opportunity to attend the Joint Commission meeting in Tuxtla Gutierrez on September 18. I know that I speak for Dr. L. S. Henderson and J. W. Snow when I say that it was not only helpful to learn about the functions of the Joint Commission and plans for the screwworm eradication program, but it was especially pleasant to meet and become better acquainted with members of the Commission and others who will be associated with the program. I certainly hope that research will continue to be associated with the program at Joint Commission meetings as well as informally by meetings and communications between our respective staffs. Our subsequent meeting with Dr. Villasenor and you on September 20 was also most helpful. I believe it did much to bring into focus the respective roles of the Joint Commission, APHIS, and ARS. It certainly confirmed our mutual objective, that of eliminating the screwworm as an economic pest in the U. S. and Mexico.

I was extremely pleased that Dr. Mulhern took the time in the Joint Commission meeting to clarify ARS research responsibility in relation to APHIS. I also deeply appreciated your thorough discussion of the subject and detailed explanation of the organizational structure and relationship between APHIS and ARS in the meeting which included members of Dr. Villasenor's staff.

As expressed during the meeting with Dr. Villasenor and you, I would like to see a working arrangement developed whereby ARS scientists can meet routinely with Joint Commission operational people in order to learn about and discuss problems which are being encountered in the eradication program. This kind of communication would enable us to determine which problems are researchable and decide where we can make a meaningful contribution on the basis of expertise and available resources within ARS. Such meetings would also lead to joint efforts between methods development and research as well as between field operations people, methods development and research.

I realize that the Tuxtla Gutierrez plant is not yet in operation and, as a result, Joint Commission field

people are not yet aware of some specific problems which will undoubtedly be encountered. However, in the meantime, we already know of many other problems which need research. Several of these have been emphasized at the quarterly meetings in Mission, as well as at the recent Joint Commission meeting. I am referring to such problems as the need for a good sex attractant, variations in number and distribution of wild fly populations, and entraining flies for release on appropriate circadian rhythms. It is my understanding that the Whitten investigating committee report will also note the need for this and other research. I am convinced that we can anticipate other problems to surface as the eradication program moves into central and southern Mexico, i.e., as releases are made in more tropical climates and under conditions of extremely variable terrain.

This research will be of direct benefit to the Joint Commission program. As long as there are fly populations in Texas, much of the research can and will be conducted there. As you can well appreciate, this is simply a matter of logistics and cost. However, some of the work will need to be undertaken in Mexico. In those cases, it is my understanding that Dr. Villasenor and you favor the work but want to be kept informed as to the plans for research and travel. Also, it was in relation to research plans and travel that Dr. Villasenor asked that I propose an administrative plan which would keep the Joint Commission informed about our research programs in Mexico and the associated travel of ARS scientists.

I suggest the following procedure. When our Screwworm Research Laboratory at Mission, Texas, sees a need for an experiment which should be conducted in Mexico, they will develop a plan for the experiment which will include the following information: (1) Objective; (2) Names of ARS personnel; (3) Location(s) in Mexico; (4) Anticipated duration; and (5) Cooperators, if any. The Laboratory will develop the plan as far in advance of the beginning date of the experiment as possible. Inasmuch as Dr. Villasenor has indicated that he would like for you to serve as liaison between ARS and the Joint Commission, the Leader of the Laboratory would forward the plan to

you for review, along with carbon copies to Dr. John Hejl, this office, and to the Director of our Subtropical Texas Area. The Laboratory should have the plan in your hands one month in advance of the date that the experiment would begin. However, I would anticipate that there will be a few times that we might want to shorten the time interval. For example, if we make a breakthrough on the development of a sex attractant, we should evaluate the material as soon as possible in several locations. Otherwise, the one-month interval should provide adequate time for you, Dr. Villasenor, and your staffs to review the plan before the research is to be initiated. Presumably, concurrence would be over your signature and direct to the Leader of our Screwworm Laboratory with carbon copies to those who received carbon copies of the plan.

We should have no problem in keeping your office informed of travel, which involves screwworm research, by ARS personnel into Mexico. In fact, our regulations stipulate that they notify the Agricultural Attache in any foreign country prior to travel into that country. Notification would be in advance and I suggest 48 hours unless there are extenuating circumstances which would make a shorter time interval necessary.

As a research project proceeds, Dr. Villasenor and you obviously want to be kept informed of progress. In the case of a long-term experiment, I suggest that the scientist conducting the experiment send informal, letter-type, monthly progress reports to you. Such reports would not attempt to speculate on the outcome of the experiment or draw conclusions from incomplete data, but would provide information about problems encountered in carrying out the experiment, observations which relate to screwworm population changes, general trends in the data, and so forth. Upon conclusion of the experiment and after analyzing the data, the scientist would prepare a more formal report of results and transmit it to your office as well as to Dr. Hejl, this office, and his Area Director at Weslaco.

In the case of experiments of a short duration, those that will run only a week or two, the scientist would prepare a final report after analysis of the data and forward it to you along with the same distribution as a final report from a long-term experiment.

I will be most interested in having your reactions to the above suggestions. Incidentally, just before leaving your office, I told you I could not remember our telex

number. It is (504) 589-6574. I believe you have my office number, but in case you do not, it is (504) 589-6614. ~~I look forward to hearing from you.~~

Sincerely,

H C Cox
Associate Deputy Administrator

cc:
F. J. Mulhern, APHIS, Washington, D. C.
J. M. Hejl, APHIS, Washington, D. C.
D. Williams, APHIS, Hyattsville, Md.
R. J. McCracken, OA, ARS, Washington, D. C.
E. A. Taylor, Weslaco, Texas
J. W. Snow, Mission, Texas

Rec'd via telephone 10-3-74 1:20 pm

TO: L.S. HENDERSON, NPS, BELTSVILLE
E. A. TAYLOR, WESLACO, TEXAS
FM: H C COX, NEW ORLEANS--

DRAFT:HCCox:mlw
ARS:DASR:10/3/74

YOUR COMMENTS BY
TELEPHONE, PLEASE.

Dear Dr. Meyer:

I would again like to express my appreciation to Dr. Antonio Villasenor, you, and the other members of the Joint Commission for the opportunity to attend the Joint Commission meeting in Tuxtla Gutierrez on September 18. I know that I speak for Dr. L. S. Henderson and J. W. Snow when I say that it was not only helpful to learn about the functions of the Joint Commission and plans for the screwworm eradication program, but it was especially pleasant to meet and become better acquainted with members of the Commission and others who will be associated with the program. I certainly hope that research will continue to be associated with the program at Joint Commission meetings as well as informally by meetings and communications between our respective staffs. Our subsequent meeting with Dr. Villasenor and you on September 20 was also most helpful. I believe it did much to bring into focus the respective roles of the Joint Commission, APHIS, and ARS. It certainly confirmed our mutual objective, that of eliminating the screwworm as an economic pest in the U. S. and Mexico.

I was extremely pleased that Dr. Mulhern took the time in the Joint Commission meeting to clarify ARS research responsibility in relation to APHIS. I also deeply appreciated your thorough discussion of the subject and detailed explanation of the organizational structure and relationship between APHIS and ARS in the meeting which included members of Dr. Villasenor's staff.

As expressed during the meeting with Dr. Villasenor and you, I would like to see a working arrangement developed whereby ARS scientists can meet routinely with Joint Commission operational people in order to learn about and discuss problems which are being encountered in the eradication program. This kind of communication would enable us to determine which problems are researchable and decide where we can make a meaningful contribution on the basis of expertise and available resources within ARS. Such meetings would also lead to joint efforts between methods development and research as well as between field operations people, methods development and research.

I realize that the Tuxtla Gutierrez plant is not yet in operation and, as a result, Joint Commission field

people are not yet aware of some specific problems which will undoubtedly be encountered. However, in the meantime, we already know of many other problems which need research. Several of these have been emphasized at the quarterly meetings in Mission, as well as at the recent Joint Commission meeting. I am referring,to such problems as the need for a good sex attractant, variations in number and distribution of wild fly populations, and entraining flies for release on appropriate circadian rhythms. It is my understanding that the Whitten investigating committee report will also note the need for this and other research. I am convinced that we can anticipate other problems to surface as the eradication program moves into central and southern Mexico, i.e., as releases are made in more tropical climates and under conditions of extremely variable terrain.

This research will be of direct benefit to the Joint Commission program. As long as there are fly populations in Texas, much of the research can and will be conducted there. As you can well appreciate, this is simply a matter of logistics and cost. However, some of the work will need to be undertaken in Mexico. In those cases, it is my understanding that Dr. Villasenor and you favor the work but want to be kept informed as to the plans for research and travel. Also, it was in relation to research plans and travel that Dr. Villasenor asked that I propose an administrative plan which would keep the Joint Commission informed about our research programs in Mexico and the associated travel of ARS scientists.

I suggest the following procedure. When our Screwworm Research Laboratory at Mission, Texas, sees a need for an experiment which should be conducted in Mexico, they will develop a plan for the experiment which will include the following information: (1) Objective; (2) Names of ARS personnel; (3) Location(s) in Mexico; (4) Anticipated duration; and (5) Cooperators, if any. The Laboratory will develop the plan as far in advance of the beginning date of the experiment as possible. Inasmuch as Dr. Villasenor has indicated that he would like for you to serve as liaison between ARS and the Joint Commission, the Leader of the Laboratory would forward the plan to

you for review, along with carbon copies to Dr. John Hejl, this office, and to the Director of our Subtropical Texas Area. The Laboratory should have the plan in your hands one month in advance of the date that the experiment would begin. However, I would anticipate that there will be a few times that we might want to shorten the time interval. For example, if we make a breakthrough on the development of a sex attractant, we should evaluate the material as soon as possible in several locations. Otherwise, the one-month interval should provide adequate time for you, Dr. Villasenor, and your staffs to review the plan before the research is to be initiated. Presumably, concurrence would be over your signature and direct to the Leader of our Screwworm Laboratory with carbon copies to those who received carbon copies of the plan.

We should have no problem in keeping your office informed of travel, which involves screwworm research, by ARS personnel into Mexico. In fact, our regulations stipulate that they notify the Agricultural Attache in any foreign country prior to travel into that country. Notification would be in advance and I suggest 48 hours unless there are extenuating circumstances which would make a shorter time interval necessary.

As a research project proceeds, Dr. Villasenor and you obviously want to be kept informed of progress. In the case of a long-term experiment, I suggest that the scientist conducting the experiment send informal, letter-type, monthly progress reports to you. Such reports would not attempt to speculate on the outcome of the experiment or draw conclusions from incomplete data, but would provide information about problems encountered in carrying out the experiment, observations which relate to screwworm population changes, general trends in the data, and so forth. Upon conclusion of the experiment and after analyzing the data, the scientist would prepare a more formal report of results and transmit it to your office as well as to Dr. Hejl, this office, and his Area Director at Weslaco.

In the case of experiments of a short duration, those that will run only a week or two, the scientist would prepare a final report after analysis of the data and forward it to you along with the same distribution as a final report from a long-term experiment.

I will be most interested in having your reactions to the above suggestions. Incidentally, just before leaving your office, I told you I could not remember our telex

number. It is (504) 589-6574. I believe you have my office number, but in case you do not, it is (504) 589-6614. I look forward to hearing from you.

Sincerely,

H C Cox
Associate Deputy Administrator

cc:
F. J. Mulhern, APHIS, Washington, D. C.
J. M. Hejl, APHIS, Washington, D. C.
D. Williams, APHIS, Hyattsville, Md.
R. J. McCracken, OA, ARS, Washington, D. C.
B. A. Taylor, Weslaco, Texas
J. W. Snow, Mission, Texas

Mr. E. A. Taylor
Weslaco, Texas

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
701 LOYOLA AVENUE
P. O. BOX 53326
NEW ORLEANS, LOUISIANA 70153

June 3, 1975

Subject: Screwworm

To: T. W. Edminster, Administrator

As indicated during my brief telephone report to you on May 16, I attended the Screwworm Commission meeting in Guadalajara, Mexico, on May 13. As you know, on the basis of your discussions with Dr. Frank Mulhern and my contacts with others in APHIS, we anticipated that the Mexicans would again express concern about research operations in Mexico. However, I am pleased to report that this situation did not develop.

The last item on the agenda of the Commission meeting was a report on ARS research. Dr. J. Wendell Snow, Leader of our Laboratory at Mission, Texas, gave a very good 30-minute presentation on current research. The report seemed to be well received by the Commissioners. Following Dr. Snow's report, Dr. Mulhern commented on the importance of research to the Screwworm Eradication Program and noted that at the last Commission meeting the Mexicans expressed concern about ARS scientists working in Mexico. He specifically asked if this and related problems have been resolved. Dr. Villasenor, Director of the Mexican-American Commission, replied that there was no problem as far as he is concerned. I noted that we have proposed a procedure for informing the Commission of proposed research activities in Mexico, that we are following this procedure, and that we have already received concurrence on an upcoming experiment. Dr. Reta-Petersen, Subsecretary of the Mexican Department of Agriculture and a member of the Commission, concurred in the importance of research and noted the possibility that the Mexican Department might be appropriated funds for research. Dr. Reta invited us to visit their National Research Institute

(Instituto Nacional de Investigaciones Pecuarias) in June and become better acquainted with their scientists with the hope that we could develop some cooperative research programs. I replied that we would be glad to meet with them. Apparently Dr. Reta intends to personally introduce the ARS people at the Institute; therefore, I believe that this visit should be made by the SR Deputy along with the Head of our Mission Laboratory. Dr. Cooper agrees. Dr. Reta will return from Europe this week . I plan to telephone him and attempt to arrange the meeting between him, Dr. Cooper and Dr. Snow.

During the Commission meeting, NASA and their Mexican counterpart, CONEE, gave a report of their remote sensing studies in Mexico. They asked that the Commission support the final phase of the work by providing data on numbers and locations of screwworm cases in Mexico. These data would be correlated with remote sensing data of weather in Mexico. This led to a great deal of heated controversy. Apparently Drs. Villasenor and Reta feel that NASA and CONEE have not lived up to an agreement regarding the work and that Mexican laws were ignored. After rather protracted discussion it was agreed that the Commission would accept remote sensing maps from NASA but that NASA personnel would not be permitted to enter Mexico except to visit the CONEE offices in order to develop a new agreement for consideration by the Commission.

APHIS has an understandable interest in the possibility of using the NASA remote sensing model and would like to have research verification of its probabilities. However, in view of the extremely touchy relationship between NASA, CONEE, and the Mexican members of the Commission, we should proceed cautiously as we try to help in this matter. I understand that Dr. Mulhern, in responding to your earlier letter on remote sensing, suggested a work group composed of Dr. Charles Barnes (NASA), Dr. Robert Miller (ARS), Dr. Wendell Snow (ARS), Dr. B. G. Hightower and counterpart (representing the Joint Commission), and Dr. James Novy and/or Dr. David Anderson (APHIS) to look into the subject. I do not know the status of his recommendation to you, but I suggest that it might be desirable to first convene

a small executive meeting of ARS and APHIS personnel to consider the subject before establishing a more composite group. The executive session should definitely include Dr. Wendell Snow and Dr. Donald Williams (APHIS). Also, there might be some merit in excluding Dr. Charles Barnes (NASA) from the work group which will evaluate the NASA model. He could serve as a resource person to be called by the work group but their report would not be "compromised" by the presence of an "interested party." In fact, on the basis of informal discussions with Dr, Barnes, I believe he would favor such an arrangement.

Dr. Barnes recently indicated that some of his administrators are somewhat frustrated over their experience in Mexico and are considering dropping further activities. In view of the possible application of their system (model) to the eradication program, I hope that we can arrange research verification before NASA does terminate support.

H C Cox
Associate Deputy Administrator

cc:
F. J. Mulhern, Administrator, APHIS
J. W. Snow, Mission, Texas
H. O. Graumann, Assistant Administrator, NPS-PES
E. A. Taylor, Area Director
L. S. Henderson, NPS-PES
T. B. Kinney, Assistant Administrator, NPS-LVS
R. J. McCracken, Associate Administrator

UNITED STATES DEPARTMENT OF AGRICULTURE
AGRICULTURAL RESEARCH SERVICE
SOUTHERN REGION
Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

October 9, 1975

Screwworm

Subject: Research in Mexico

To: H C Cox
Associate Deputy Administrator
Southern Region, USDA, ARS
New Orleans, Louisiana 70153

Through: E. A. Taylor, Area Director, Subtropical Texas Area

I returned yesterday from a visit with Drs. Villasenor, Meyer and Werring, in Mexico City. As you know, this meeting was instigated by Drs. Werring and Villasenor to discuss ARS research in Mexico. From my prior conversations with Dr. Werring, I thought we would address specific research needs and visit the Mexican research facility at Palo Alto. In an earlier visit, Dr. Cooper and I were informed that this was the group (formerly working on vampire bats) for cooperation.

However, Dr. Villasenor informed me that he and Dr. Pablo Zieroll Reyes, the new Sub-secretary of Agriculture, had reached the decision that ARS should have no contact with this or any other Mexican agency. The reason given was to prevent fragmentation of the screwworm effort within two Mexican agencies. Dr. Villasenor stated the treaty gave the Commission control of all screwworm activity in Mexico and they insisted on continuing with this guideline.

Dr. Villasenor said before we can transfer people into Mexico we must submit a proposal to the Mexican delegation stating the areas requiring research and the number of scientists needed to achieve this research. Then, the Mexican delegation, after approval of our plan, will hire an appropriate counterpart for each American scientist (the Mexican scientists will work directly for Dr. Villasenor). Salaries of the US and Mexican scientists will be paid by the respective governments, but other expenditures (travel, per diem, equipment, etc.) and activities will come under Commission control. Dr. Meyer says this does not eliminate direct ARS procurement of some

items, but such expenditures must not conflict with Commission desires and cannot be counted as part of the American monetary contribution. In addition, he feels ARS must make funds available to the Commission to offset additional costs caused by the research effort.

The Mexican requirements in summary are:

1. All ARS scientists must have counterparts. As an example, this does not mean an American entomologist and Mexican chemist will be counterparts in developing an attractant. It means two people will do the identical job with all decisions made on a joint basis.

2. All proposed research, including detailed procedures and time-tables, must be submitted in writing to the Commission for approval prior to execution. The Commission has the authority to refuse or require any research. — This could lead to them directing our program

As you know, I have continually given thought to the best way we can provide the research needed for the Mexican-American program to be successful. It is very easy to forget the problems in the southwestern program will also be in the Mexican program (probably x 10). Therefore, we must provide all the support possible based on available funds and personnel. The best way is not to transfer people to Tuxtla Gutierrez at this time but increase activities at Mission. Reasons for this conclusion are:

1. For monetary reasons: The operational costs for scientists in Mexico are greater than in the United States. Dr. Meyer says it costs him around $40,000 to get each person to Mexico (6 months' Spanish training, per diem, moving expenses). After arrival, housing allowance, schooling costs, and home leave effectively elevate the annual cost about $15,000/person.

2. Nature of the research: Most of the needed research in Mexico is ecological, and travel will be necessary regardless of the base location. The area needing maximum effort is around Poza Rica, about 500 miles from Mission and 600 miles from Tuxtla Gutierrez. The city of Colina, another area requiring much research, is about 700 miles from Mission and 1,000 miles from Tuxtla Gutierrez. We have recently purchased a 24-foot camper because of the need for research in isolated areas of Mexico. In addition, more commercial travel routes are available in the Mission area than from Tuxtla Gutierrez.

3. Logistics: Much of the equipment we use in research is specialized and repairs and service will be expensive or impossible to obtain in Tuxtla Gutierrez. Also, communication with the scientific

community will be difficult. Currently, we have research relationships with Texas A&M, the University of Texas, Metabolism Laboratory at Fargo, Attractants Laboratory at Gainesville, and NASA. Their input will be easier to coordinate from our Mission location. In addition, qualified support personnel are difficult to hire in Tuxtla Gutierrez.

4. Type of work at Tuxtla Gutierrez: Most of the problems at the factory will be operational and directly involved with production. Distribution and handling problems will be equally great at the distribution centers. The Methods Development Sections from Tuxtla Gutierrez and Mission can best handle these problems.

5. Lack of research freedom: The counterpart system (on the bench level) and lack of research freedom will effectively eliminate the possibility of meaningful research. Research direction from the Commission will not permit our evaluation of the underlying causes of recent program difficulties. ARS must be able to go beyond the support of a release program and deal with population dynamics, dispersal and behavior of the fly in the total ecological area of the United States and Mexico. Only through this type research can past problems be eliminated and future ones avoided. I anticipate personnel problems and inability to obtain these goals under the proposed guidelines.

These are the reasons I feel we should support the program from Mission. Our scientists can work under United States rules except while traveling and working in Mexico. This system buys more research for our dollars; and even with the proposed increases, we are still very short of research dollars. I believe this should be proposed to the Commission making sure they understand our reasons. We should also assure them or our willingness to provide research in the areas they feel necessary and our equal willingness to play by Commission rules. I think APHIS will be initially cold to the idea but within a short period of time will see the value. Once Mission is closed, if necessary, our personnel can then be assigned to Mexico. In this way, the equipment and other tools of research can also be transferred from Mission at the same time as our personnel.

Depends on the rules.

Questionable if we need to stay in the U.S. now — why can we more easily under the same rules

I definitely think this should be discussed with Drs. Meyer and Villasenor. I believe this arrangement will prove satisfactory to Dr. Villasenor in that it will eliminate the need for an expensive new structure and at the same time provide a method to accomplish the needed research. All our activities in Mexico are conducted in cooperation with their Methods or Field Operations Sections anyway, so these people can serve as counterparts. It seems to me everyone "wins" in this proposal.

Please let me know your reaction to this proposal at the earliest convenience.

J. Wendell Snow
Research Leader

cc Dr. Linquist

Area Office copy

Screwworm Research Laboratory
P. O. Box 986
Mission, Texas 78572

October 9, 1975

Subject: Research in Mexico

To: H C Cox
Associate Deputy Administrator
Southern Region, USDA, ARS
New Orleans, Louisiana 70153

Through: E. A. Taylor, Area Director, Subtropical Texas Area

Edgar A. Taylor

Forwarded to HC 10/30/75

I returned yesterday from a visit with Drs. Villasenor, Meyer and Werring, in Mexico City. As you know, this meeting was instigated by Drs. Werring and Villasenor to discuss ARS research in Mexico. From my prior conversations with Dr. Werring, I thought we would address specific research needs and visit the Mexican research facility at Palo Alto. In an earlier visit, Dr. Cooper and I were informed that this was the group (formerly working on vampire bats) for cooperation.

However, Dr. Villasenor informed me that he and Dr. Pablo Zieroll Reyes, the new Sub-secretary of Agriculture, had reached the decision that ARS should have no contact with this or any other Mexican agency. The reason given was to prevent fragmentation of the screwworm effort within two Mexican agencies. Dr. Villasenor stated the treaty gave the Commission control of all screwworm activity in Mexico and they insisted on continuing with this guideline.

Dr. Villasenor said before we can transfer people into Mexico we must submit a proposal to the Mexican delegation stating the areas requiring research and the number of scientists needed to achieve this research. Then, the Mexican delegation, after approval of our plan, will hire an appropriate counterpart for each American scientist (the Mexican scientists will work directly for Dr. Villasenor). Salaries of the US and Mexican scientists will be paid by the respective governments, but other expenditures (travel, per diem, equipment, etc.) and activities will come under Commission control. Dr. Meyer says this does not eliminate direct ARS procurement of some

items, but such expenditures must not conflict with Commission desires and cannot be counted as part of the American monetary contribution. In addition, he feels ARS must make funds available to the Commission to offset additional costs caused by the research effort.

The Mexican requirements in summary are:

1. All ARS scientists must have counterparts. As an example, this does not mean an American entomologist and Mexican chemist will be counterparts in developing an attractant. It means two people will do the identical job with all decisions made on a joint basis.

2. All proposed research, including detailed procedures and timetables, must be submitted in writing to the Commission for approval prior to execution. The Commission has the authority to refuse or require any research.

As you know, I have continually given thought to the best way we can provide the research needed for the Mexican-American program to be successful. It is very easy to forget the problems in the southwestern program will also be in the Mexican program (probably x 10). Therefore, we must provide all the support possible based on available funds and personnel. The best way is not to transfer people to Tuxtla Gutierrez at this time but increase activities at Mission. Reasons for this conclusion are:

1. For monetary reasons: The operational costs for scientists in Mexico are greater than in the United States. Dr. Meyer says it costs him around $40,000 to get each person to Mexico (6 months' Spanish training, per diem, moving expenses). After arrival, housing allowance, schooling costs, and home leave effectively elevate the annual cost about $15,000/person.

2. Nature of the research: Most of the needed research in Mexico is ecological, and travel will be necessary regardless of the base location. The area needing maximum effort is around Poza Rica, about 500 miles from Mission and 600 miles from Tuxtla Gutierrez. The city of Colina, another area requiring much research, is about 700 miles from Mission and 1,000 miles from Tuxtla Gutierrez. We have recently purchased a 24-foot camper because of the need for research in isolated areas of Mexico. In addition, more commercial travel routes are available in the Mission area than from Tuxtla Gutierrez.

3. Logistics: Much of the equipment we use in research is specialized and repairs and service will be expensive or impossible to obtain in Tuxtla Gutierrez. Also, communication with the scientific

items, but such expenditures must not conflict with Commission desires and cannot be counted as part of the American monetary contribution. In addition, he feels ARS must make funds available to the Commission to offset additional costs caused by the research effort.

The Mexican requirements in summary are:

1. All ARS scientists must have counterparts. As an example, this does not mean an American entomologist and Mexican chemist will be counterparts in developing an attractant. It means two people will do the identical job with all decisions made on a joint basis.

2. All proposed research, including detailed procedures and time-tables, must be submitted in writing to the Commission for approval prior to execution. The Commission has the authority to refuse or require any research.

As you know, I have continually given thought to the best way we can provide the research needed for the Mexican-American program to be successful. It is very easy to forget the problems in the southwestern program will also be in the Mexican program (probably x 10). Therefore, we must provide all the support possible based on available funds and personnel. The best way is not to transfer people to Tuxtla Gutierrez at this time but increase activities at Mission. Reasons for this conclusion are:

1. For monetary reasons: The operational costs for scientists in Mexico are greater than in the United States. Dr. Meyer says it costs him around $40,000 to get each person to Mexico (6 months' Spanish training, per diem, moving expenses). After arrival, housing allowance, schooling costs, and home leave effectively elevate the annual cost about $15,000/person.

2. Nature of the research: Most of the needed research in Mexico is ecological, and travel will be necessary regardless of the base location. The area needing maximum effort is around Poza Rica, about 500 miles from Mission and 600 miles from Tuxtla Gutierrez. The city of Colima, another area requiring much research, is about 700 miles from Mission and 1,000 miles from Tuxtla Gutierrez. We have recently purchased a 24-foot camper because of the need for research in isolated areas of Mexico. In addition, more commercial travel routes are available in the Mission area than from Tuxtla Gutierrez.

3. Logistics: Much of the equipment we use in research is specialized and repairs and service will be expensive or impossible to obtain in Tuxtla Gutierrez. Also, communication with the scientific

community will be difficult. Currently, we have research relationships with Texas A&M, the University of Texas, Metabolism Laboratory at Fargo, Attractants Laboratory at Gainesville, and NASA. Their input will be easier to coordinate from our Mission location. In addition, qualified support personnel are difficult to hire in Tuxtla Gutierrez.

4. Type of work at Tuxtla Gutierrez: Most of the problems at the factory will be operational and directly involved with production. Distribution and handling problems will be equally great at the distribution centers. The Methods Development Sections from Tuxtla Gutierrez and Mission can best handle these problems.

5. Lack of research freedom: The counterpart system (on the bench level) and lack of research freedom will effectively eliminate the possibility of meaningful research. Research direction from the Commission will not permit our evaluation of the underlying causes of recent program difficulties. ARS must be able to go beyond the support of a release program and deal with population dynamics, dispersal and behavior of the fly in the total ecological area of the United States and Mexico. Only through this type research can past problems be eliminated and future ones avoided. I anticipate personnel problems and inability to obtain these goals under the proposed guidelines.

These are the reasons I feel we should support the program from Mission. Our scientists can work under United States rules except while traveling and working in Mexico. This system buys more research for our dollars; and even with the proposed increases, we are still very short of research dollars. I believe this should be proposed to the Commission making sure they understand our reasons. We should also assure them or our willingness to provide research in the areas they feel necessary and our equal willingness to play by Commission rules. I think APHIS will be initially cold to the idea but within a short period of time will see the value. Once Mission is closed, if necessary, our personnel can then be assigned to Mexico. In this way, the equipment and other tools of research can also be transferred from Mission at the same time as our personnel.

I definitely think this should be discussed with Drs. Meyer and Villasenor. I believe this arrangement will prove satisfactory to Dr. Villasenor in that it will eliminate the need for an expensive new structure and at the same time provide a method to accomplish the needed research. All our activities in Mexico are conducted in cooperation with their Methods or Field Operations Sections anyway, so these people can serve as counterparts. It seems to me everyone "wins" in this proposal.

community will be difficult. Currently, we have research relationships with Texas A&M, the University of Texas, Metabolism Laboratory at Fargo, Attractants Laboratory at Gainesville, and NASA. Their input will be easier to coordinate from our Mission location. In addition, qualified support personnel are difficult to hire in Tuxtla Gutierrez.

4. Type of work at Tuxtla Gutierrez: Most of the problems at the factory will be operational and directly involved with production. Distribution and handling problems will be equally great at the distribution centers. The Methods Development Sections from Tuxtla Gutierrez and Mission can best handle these problems.

5. Lack of research freedom: The counterpart system (on the bench level) and lack of research freedom will effectively eliminate the possibility of meaningful research. Research direction from the Commission will not permit our evaluation of the underlying causes of recent program difficulties. ARS must be able to go beyond the support of a release program and deal with population dynamics, dispersal and behavior of the fly in the total ecological area of the United States and Mexico. Only through this type research can past problems be eliminated and future ones avoided. I anticipate personnel problems and inability to obtain these goals under the proposed guidelines.

These are the reasons I feel we should support the program from Mission. Our Scientists can work under United States rules except while traveling and working in Mexico. This system buys more research for our dollars; and even with the proposed increases, we are still very short of research dollars. I believe this should be proposed to the Commission making sure they understand our reasons. We should also assure them of our willingness to provide research in the areas they feel necessary and our equal willingness to play by Commission rules. I think APHIS will be initially cold to the idea but within a short period of time will see the value. Once Mission is closed, if necessary, our personnel can then be assigned to Mexico. In this way, the equipment and other tools of research can also be transferred from Mission at the same time as our personnel.

I definitely think this should be discussed with Drs. Meyer and Villanueva. I believe this arrangement will prove satisfactory to Dr. Villanueva in that it will eliminate the need for an expensive new structure and at the same time provide a method to accomplish the needed research. All our activities in Mexico are conducted in cooperation with their Methods or Field Operations Sections anyway, so these people can serve as counterparts. It seems to me everyone "wins" in this proposal.

Please let me know your reaction to this proposal at the earliest convenience.

J. Wendell Snow
Research Leader

cc Dr. Linquist

N C Cox

Please let me know your reaction to this proposal at the earliest convenience.

J. Wendall Show
Research Leader

cc Dr. Lingwist

SUBTROPICAL TEXAS AREA
P. O. Box 267
Weslaco, Texas 78596

October 30, 1975

FOR OFFICIAL USE ONLY

Subject: Screwworm Research in Mexico

To: A. W. Cooper, Deputy Administrator
Southern Region, ARS-USDA
New Orleans, LA

The enclosed memorandum of October 9, 1975 to H C Cox from J. W. Snow on the above subject indicates that there continues to be a problem with the Co-Directors of the Mexican-American Screwworm Eradication Commission. We should not transfer any scientist or funds to Chiapas, Mexico until this problem is resolved or the Co-Directors are replaced.

The APHIS program in South Texas has been in a hopeless situation for the past two months. Trapping data and egg-mass wound infestation data has shown that the wild population outnumbers the sterile release flies. Releases are having no effect and for all practical purposes, the factory could have been shut down in August. A special report and proposal is in preparation.

Therefore, all of the FY 1976 increase funds and new positions, including the $173,000 (Chiapas, Mexico), are urgently needed to support the screwworm research program at Mission, TX. This will allow our scientists to deal with the major research needs--population dynamics, dispersal and behavior of the fly in the total ecological area. Research in Southern Mexico can be effectively carried out on a temporary-duty basis of 2-3 weeks at a time.

Edgar A. Taylor

E. A. Taylor
Area Director

Enclosure

FOR OFFICIAL USE ONLY

ARS:SR:STA:EATaylor:je 10/30/75

SUBTROPICAL TEXAS AREA
P. O. Box 267
Weslaco, Texas 78596

October 30, 1975

FOR OFFICIAL USE ONLY

Subject: Screwworm Research in Mexico

To: A. W. Cooper, Deputy Administrator
Southern Region, ARS-USDA
New Orleans, LA

The enclosed memorandum of October 9, 1975 to H C Cox from J. W. Snow on the above subject indicates that there continues to be a problem with the Co-Directors of the Mexican-American Screwworm Eradication Commission. We should not transfer any scientist or funds to Chiapas, Mexico until this problem is resolved or the Co-Directors are replaced.

The APHIS program in South Texas has been in a hopeless situation for the past two months. Trapping data and egg-mass wound infestation data has shown that the wild population outnumbers the sterile release flies. Releases are having no effect and for all practical purposes, the factory could have been shut down in August. A special report and proposal is in preparation.

Therefore, all of the FY 1976 increase funds and new positions, including the $173,000 (Chiapas, Mexico), are urgently needed to support the screwworm research program at Mission, TX. This will allow our scientists to deal with the major research needs--population dynamics, dispersal and behavior of the fly in the total ecological area. Research in Southern Mexico can be effectively carried out on a temporary-duty basis of 2-3 weeks at a time.

E. A. Taylor
Area Director

Enclosure

FOR OFFICIAL USE ONLY

ARS:SR:STA:EATaylor:je 10/30/75